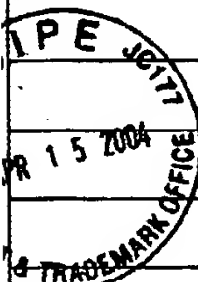


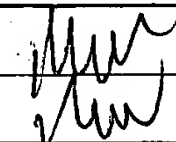
FORM PTO-1449

FOURTH SUPPLEMENTAL  
INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.  
1530.0060004/EKS/EJH/PACAPPLICATION NO.  
09/557,907FIRST NAMED INVENTOR  
Horton *et al.*FILING DATE  
April 21, 2000ART UNIT  
1632


## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
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## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL4	WO 98/08947 A1	03/05/1998	WIPO			Yes No
	AM4	WO 99/26663 A2	06/03/1999	WIPO			Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR		
	AS		
	AT	42	Acsadi, G., <i>et al.</i> , "Direct Gene Transfer and Expression into Rat Heart in Vivo," <i>New Biol.</i> 3:71-81, W.B. Saunders (1991)

EXAMINER

DATE CONSIDERED

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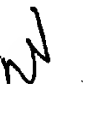
## U.S. PATENT DOCUMENTS

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	43	Brunda, M.J., <i>et al.</i> , "Antitumor and Antimetastatic Activity of Interleukin 12 against Murine Tumors," <i>J. Exp. Med.</i> 178:1223-1230, The Rockefeller University Press (1993)
	AS	43	Chen, Y., <i>et al.</i> , "DNA Vaccines Encoding Full-Length or Truncated Neu Induce Protective Immunity against Neu-Expressing Mammary Tumors," <i>Canc. Res.</i> 58:1965-1971, American Association for Cancer Research (May 1998)
	AT	43	Desnick, R.J. and Schuchman, E.H., "Gene therapy for genetic diseases," <i>Acta Paediatr. Jpn.</i> 40:191-203, Blackwell Scientific (June 1998)

EXAMINER

DATE CONSIDERED

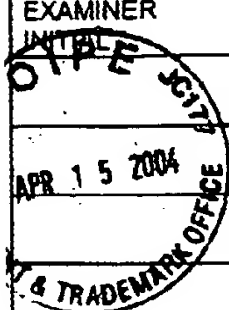
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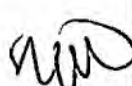


## U.S. PATENT DOCUMENTS

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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>44</u>	Hersh, E.M., and Stopeck, A.T., "Advances in the Biological Therapy and Gene Therapy of Malignant Disease," <i>Clin. Canc. Res.</i> 3:2623-2629, American Association for Cancer Research (December 1997)
	AS	<u>44</u>	Irvine, K.R., <i>et al.</i> , "Cytokine Enhancement of DNA Immunization Leads to Effective Treatment of Established Pulmonary Metastases," <i>J. Immunol.</i> 156:238-245, The American Association of Immunologists (January 1996)
	AT	<u>44</u>	Jiao, S., <i>et al.</i> , "Direct Gene Transfer into Nonhuman Primate Myofibers <i>In Vivo</i> ," <i>Hum. Gene Ther.</i> 3:21-33, Mary Ann Liebert, Inc. (1992)

EXAMINER

DATE CONSIDERED

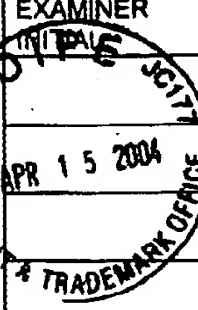
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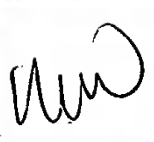
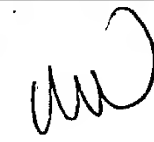

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>45</u>	Mandl, C.W., <i>et al.</i> , "In vitro-synthesized infectious RNA as an attenuated live vaccine in a flavivirus model," <i>Nat. Med.</i> 4:1438-1440, Nature America Inc. (December 1998)
	AS	<u>45</u>	Marshall, E., "Cancer Trial of Interleukin-12 Halted," <i>Science</i> 268:1555, American Association for the Advancement of Science (1995)
	AT	<u>45</u>	Moelling, K., "Naked DNA - the poor man's gene therapy?" <i>Gene Ther.</i> 5:573-574, Stockton Press (May 1998)

EXAMINER

DATE CONSIDERED

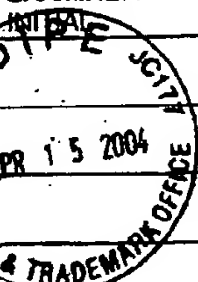
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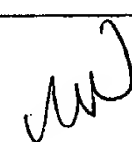


## U.S. PATENT DOCUMENTS

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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>46</u>	Rakhmievich, A.L., <i>et al.</i> , "Gene gun-mediated skin transfection with interleukin 12 gene results in regression of established primary and metastatic murine tumors," <i>Proc. Natl. Acad. Sci. USA</i> 93:6291-6296, National Academy of Sciences (June 1996)
	AS	<u>46</u>	Sun, W.H., <i>et al.</i> , "In vivo cytokine gene transfer by gene gun reduces tumor growth in mice," <i>Proc. Natl. Acad. Sci. USA</i> 92:2889-2893, National Academy of Sciences (1995)
	AT	<u>46</u>	Tan, J., <i>et al.</i> , "Injection of Complementary DNA Encoding Interleukin-12 Inhibits Tumor Establishment at a Distant Site in a Murine Renal Carcinoma Model," <i>Canc. Res.</i> 56:3399-3403, American Association for Cancer Research (August 1996)

EXAMINER

DATE CONSIDERED

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FORM PTO-1449  FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1530.0060004/EKS/EJH/PAC	APPLICATION NO. 09/557,907
	FIRST NAMED INVENTOR Horton <i>et al.</i>	
	FILING DATE April 21, 2000	ART UNIT 1632


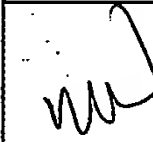
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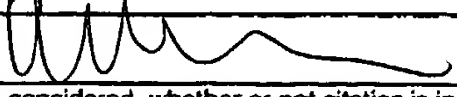
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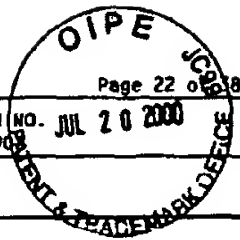
## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	47	Wigginton, J.M., <i>et al.</i> , "Administration of Interleukin 12 With Pulse Interleukin 2 and the Rapid and Complete Eradication of Murine Renal Carcinoma," <i>J. Natl. Canc. Inst.</i> 88:38-43, Oxford University Press (January 1996)
	AS	47	Xiang, Z., and Ertl, H.C.J., "Manipulation of the Immune Response to a Plasmid-Encoded Viral Antigen by Coinoculation with Plasmids Expressing Cytokines," <i>Immunity</i> 2:129-135, Cell Press (1995)
	AT		

EXAMINER 	DATE CONSIDERED 12-20-04
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	



FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1530.0060004		APPLICATION NO. 09/09/557,908		JUL 20 2000	
		APPLICANT MORTON et al.		FILING DATE April 21, 2000		GROUP 1616	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
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	AL						Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
AW	AR	22	Mumper, R.J., et al., "Polyvinyl Derivatives as Novel Interactive Polymers for Controlled Gene Delivery to Muscle," <i>Pharma. Res.</i> 13:701-709 (1996).				
AW	AS	22	Mumper, R.J., et al., "Protective interactive noncondensing (PINC) polymers for enhanced plasmid distribution and expression in rat skeletal muscle," <i>J. Controlled Release</i> 52:191-203 (1998).				
AW	AT	22	Neumann, R.W., et al., "The Groshong Catheter as an Intraperitoneal Access Device in the Treatment of Ovarian Cancer Patients," <i>Gynecol. Oncol.</i> 50:291-293 (1993).				
EXAMINER					DATE CONSIDERED 10.15.01		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

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FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1530.0060004/EKS/EJH/PAC	APPLICATION NO. 09/557,907
		FIRST NAMED INVENTOR Horton et al.	
		FILING DATE April 21, 2000	ART UNIT 1632

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
<i>mm</i>	AA3	5,229,272	07/20/1993	Paul et al.	—	—	03/23/1990
<i>mm</i>	AB3	5,268,169	12/07/1993	Brandely et al.	—	—	04/13/1992
<i>mm</i>	AC3	5,314,995	05/24/1994	Fell, Jr., et al.	—	—	01/22/1990
<i>mm</i>	AD3	5,349,053	09/20/1994	Landolfi	—	—	06/10/1993
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**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AL						Yes No
	AM						Yes No
<i>mm</i>	AN4	CA 1 169 793	06/26/1984	Canada	—	—	Yes No
<i>mm</i>	AO4	WO 91/14438	10/03/1991	WIPO	—	—	Yes No
<i>mm</i>	AP4	WO 95/09917	04/13/1995	WIPO	—	—	Yes No

**OTHER (Including Author, Title, Date, Pertinent Pages, etc.)**

	AR		
	AS		
<i>mm</i>	AT	47	Beatty, J.D., et al., "Liposomes as immune adjuvants: T cell dependence," Surgery 96:345-351, Mosby-Year Book (1984)

EXAMINER <i>mm</i>	DATE CONSIDERED 12.20.04
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FIFTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.  
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WW	AL5	WO 97/30089	08/21/1997	WIPO	—	—	Yes No
	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
WW	AR	48	Cordell, B., et al., "Isolation and Characterization of a Cloned Rat Insulin Gene," <i>Cell</i> 18:533-543, Cell Press (1979)
WW	AS	48	Gould-Fogerite, S., et al., "Chimerasome-mediated gene transfer in vitro and in vivo," <i>Gene</i> 84:429-438, Elsevier Science Publishers B.V. (1989)
WW	AT	48	Hsu, M.J. and Juliano, R.L., "Interactions of Liposomes with the Reticuloendothelial System. II. Nonspecific and Receptor-Mediated Uptake of Liposomes by Mouse Peritoneal Macrophages," <i>Biochim. et Biophys. Acta</i> 720:411-419, Elsevier Biomedical Press (1982)

EXAMINER

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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	49	Malone, R.W., <i>et al.</i> , "Cationic liposome-mediated RNA transfection," <i>Proc. Natl. Acad. Sci. USA</i> 86:6077-6081, National Academy of Sciences (1989)
	AS	49	Nicolau, C., <i>et al.</i> , "In vivo expression of rat insulin after intravenous administration of the liposome-entrapped gene for rat insulin I," <i>Proc. Natl. Acad. Sci. USA</i> 80:1068-1072, National Academy of Sciences (1983)
	AT	49	Rammensee, H.-G., <i>et al.</i> , "Protein-specific cytotoxic T lymphocytes. Recognition of transfectants expressing intracellular, membrane-associated or secreted forms of $\beta$ -galactosidase," <i>Immunogenet.</i> 30:296-302, Springer-Verlag (1989)

EXAMINER

DATE CONSIDERED

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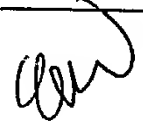


## U.S. PATENT DOCUMENTS

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	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	50	Sutcliffe, J.G., "Nucleotide sequence of the ampicillin resistance gene of <i>Escherichia coli</i> plasmid pBR322," <i>Proc. Natl. Acad. Sci. USA</i> 75:3737-3741, National Academy of Sciences (1978)
	AS	50	Database EMBASE, Accession No. 1997118387, English abstract of Kinoshita, Y., et al., "The possibility of gene immunotherapy for tumor using in vivo lipofection procedure," <i>Biotherapy</i> 11:448-450, Elsevier Science B.V. (1997)
	AT	50	Copy of International Search Report for International Patent Application No. PCT/US97/01420, mailed June 2, 1997

EXAMINER

DATE CONSIDERED

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	AN						Yes No
	AO						Yes No
	AP						Yes No

## OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

aw	AR	51	Copy of European Search Report for European Patent Application No. EP 03 01 2772, mailed June 21, 2004				
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